# **Amendments to the Drawings:**

Please replace sheet 1 of the drawings with the attached replacement sheet 1. The replacement sheet incorporates the desired changes in the drawings, and the sheet includes all of the figures that appeared on the immediately prior version of that sheet.

#### <u>REMARKS</u>

This response is accompanied with a Petition for Extension of Time extending the period for response by one month from September 19, 2006 to October 19, 2006.

The above amendments and the remarks below are responsive to the June 19, 2005 Office action that was issued in connection with the above-identified patent application. With entry of the above amendments, claims 1-15 and 17-50 are pending in the application. Drawing sheet 1, the specification, and claims 19-20 are amended. Additionally, claim 16 is cancelled without prejudice and claims 45-50 are added and are fully supported in the specification as originally filed. In view of the amendments made above, and the remarks below, applicants respectfully request reconsideration of the application under 37 C.F.R. § 1.111 and allowance of the pending claims.

## Allowable Subject Matter

Applicants thank the Examiner for the indication that claim 28 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### **Drawings**

The drawings are objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they do not include the following reference signs mentioned in the description "20" (page 5, line 20), "67" (page 9, line 1), and "22" (page 8, line 6). Pages 5 and 8 of the specification are amended to correct the reference sign "20" to reference "30" and to delete reference sign "22". Additionally, amended replacement drawing sheet 1 is provided showing reference sign "67". Thus, applicants respectfully request that the objection to the drawings be withdrawn.

### Claim Objections

Claim 19 is objected to because the claim is missing a period. That claim is amended to add the missing period. Thus, applicants respectfully request that the objection to claim 19 be withdrawn.

## **Double Patenting**

Examiner advised that should claim 12 be found allowable, claim 16 would be objected to under 37 C.F.R. § 1.75 as being a substantial duplicate thereof. Applicants have cancelled 16 without prejudice to avoid such an objection.

## Claim Rejections - 35 U.S.C. § 112

Claims 20-23 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as their invention. Specifically, claim 20 has insufficient antecedent basis for the term "replacing" in the claim. Claims 21-23 also are rejected because they depend on claim 20. Applicants have amended claim 20 to clarify that "replacing" in claim 20 refers to the same "replacing a portion of the first image data with second image data" of parent claim 19. Thus, applicants respectfully request withdrawal of the rejections of claims 20-23 under 35 U.S.C. § 112.

#### Claim Rejections - 35 U.S.C. § 103

Claims 1-3, 12-17, 24-27, 29-30, 32-34, 36-39, and 41-42 are rejected under 35 U.S.C. § 103(a) based on Lovberg et al. (U.S. Patent Application Publication No. 2004/0080448). Additionally, claims 4-11, 18-23, 31, 35, 40, and 43-44 are rejected under 35 U.S.C. § 103(a) based on Lovberg et al. in view of Keller et al. (U.S. Patent Application Publication No. 2004/0140924) or McMahon ("Softening, Blurring,

Sharpening and Embossing Images," http://web.archive.org/web/20030307155319/
http://www.vbaccelerator.com/home/VB/Code/vbMedia/Image\_Processing/Blurring\_Sha
rpening\_and\_Embossing/article.asp).

Lovberg et al. discloses a millimeter wave imaging system. The system includes at least one millimeter wave frequency scanning antenna for "collecting frequency dependent beams of millimeter wave radiation" (paragraph 0005). The antenna may include focusing elements to collect millimeter wave radiation at particular distances from the antenna (paragraphs 0025 and 0041). The collected radiation is used to create a two-dimensional image of a target (paragraph 0005).

Lovberg et al. does not disclose or suggest a method or system of interrogating a subject with electromagnetic radiation in a frequency range of about 100 MHz to about 2 THz, as recited in independent claims 1, 32, and 37. "Interrogating," as described in applicants' specification (such as on p. 4, Ins. 18-20) includes illuminating a subject with electromagnetic radiation and detecting the reflected radiation. Additionally, Lovberg et al. does not disclose or suggest a system of transmitting toward and receiving from a subject electromagnetic radiation in a frequency range of about 100 MHz to about 2 THz, as recited in independent claim 29. Instead, Lovberg et al. discloses an imaging system that only collects millimeter wave radiation from a subject. There is no disclosure or suggestion in Lovberg et al. of interrogating a subject with electromagnetic radiation in a frequency range of about 100 MHz to about 2 THz. Moreover, there is no disclosure or suggestion of transmitting toward and receiving from a subject electromagnetic radiation in a frequency range of about 100 MHz to about 2 THz. Thus, Lovberg et al. fails to disclose or suggest applicants' method or system recited in

independent claims 1, 29, 32, and 37.

Additionally, pursuant to 37 C.F.R. § 1.131, applicants submit herewith a declaration by the applicants, with referenced supporting exhibits, demonstrating their invention in this country before the effective filing date of Lovberg et al. Applicants declare that conception of their invention occurred before December 8, 2003 and that they acted diligently to reduce the invention to practice from a time earlier than December 8, 2003 to the filing date of this application. Accordingly, the applicants submit that Lovberg et al. is therefore an inappropriate reference in that it does not qualify as prior art.

For at least the above reasons, the rejections of independent claims 1, 29, 32, and 37 under 35 U.S.C. § 103(a) should be withdrawn. Claims 2-3, 12-15, 17, 24-27, 30, 33-34, 36, 38-39, and 41-42 depend from independent claims 1, 29, 32, and 37, and thus are allowable for at least the same reasons as those independent claims.

Claims 4-11, 18-23, 31, 35, 40, and 43-44 are rejected under 35 U.S.C. § 103(a) based on Lovberg et al. in view of Keller et al. or McMahon. As discussed above, Lovberg et al. is not an appropriate reference, and thus the combination of Lovberg et al. and Keller et al. or McMahon do not disclose the features of the identified claims. Additionally, claims 4-11, 18-23, 31, 35, 40, and 43-44 depend from independent claims 1, 29, 32, and 37, and thus are allowable for at least the same reasons as those independent claims.

Applicants believe that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicants respectfully request that the Examiner issue a Notice of Allowability covering the pending claims. If the

Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

### **CERTIFICATE OF MAILING**

I hereby certify that this document was transmitted to the Unites States Patent & Trademark Office, Mail Stop AMENDMENT, P.O. Box 1450, Alexandria, Virginia 22313-1450, via First Class U.S. Mail on October 19, 2006.

Respectfully submitted,

Peter D. Sabido

Registration No. 50,353 Customer No. 23581

Attorney/Agent for Applicant(s)/Assignee 520 S.W. Yamhill Street, Suite 200

Portland, Oregon 97204

Telephone: (503) 224-6655 Facsimile: (503) 295-6679